

Power Supply Product

93% Efficient 120W and 240W DIN Rail Power Supplies have Narrow Width and Long Field Life

December 2018

TDK Corporation (TSE 6762) announces the introduction of 120W and 240W rated models to the DRB series of AC-DC DIN rail mount power supplies. Their narrow width allows additional devices to be installed on the rail, saving cabinet space. The high 93% efficiency produces less internal waste heat enabling electrolytic capacitors to run cooler, extending field operating life to greater than 7 years at 75% load, 230Vac input. Applications include industrial process control, factory automation, semiconductor fabrication and test & measurement equipment.

Rated for continuous operation at 120W and 240W, the DRBs can deliver a +20% peak load for up to 10 seconds. The power supplies are currently available with a 24V output, adjustable from 24V to 28V, and can accept an 85 to 264Vac input withstanding surges of up to 300Vac for 5 seconds. The operating ambient temperature is -25°C to +70°C, -40°C cold start, derating linearly above 55°C to 50% load at 70°C.

In addition to a front panel LED, an isolated DC OK opto-coupled signal is provided to show the output status either locally or remotely. The DRB120 and DRB240 have a rugged metal enclosure measuring 124mm in height, 125mm deep and narrow widths of 35mm and 41mm respectively.

Input to output isolation is 3,000Vac, input to ground 1500Vac and the output to ground is 500Vac. Both models are certified to the safety standards of IEC/UL/CSA/EN 60950-1, IEC/UL/CSA/EN 62368-1, UL508, IEC/EN 62477-1 (OVC III) and are CE marked in accordance to the Low Voltage, EMC and RoHS Directives. The DRBs are compliant to EN55011-B, EN55032-B, CISPR11-B, CISPR22-B, EN61204-3 (Class A) radiated and conducted emissions, EN 61000-3-2 harmonics, IEC 61000-4 immunity and SEMI F47 line dip standards.

More information can be obtained at the following TDK-Lambda Americas webpage, <https://us.tdk-lambda.com/lp/products/drb-series.htm>, or by calling 800-LAMBDA-4. Product availability for all the DRB DIN rail power supplies can be found via the link to TDK-Lambda's distributor network (see "Check Distributor Stock") at <https://www.us.tdk-lambda.com/lp/>.

Major applications

Industrial process control, factory automation, semiconductor fabrication and test & measurement equipment.

Main features and benefits

- 93% efficient
- Narrow width, taking less space on the DIN rail
- Isolated DC OK signal
- Long service life (conservative electrolytic capacitor ratings)

Major specifications

| Model | | DRB120-24-1 | DRB240-24-1 |
|-----------------------|-------|--|-------------------|
| Input voltage range | Vac | 85 – 264Vac (300Vac for up to 5s) | |
| Output voltage | Vdc | 24V (adjustable from 24 to 28V) | |
| Output power | W | 120W (144W peak) | 240W (288W peak) |
| Safety Certifications | - | IEC/UL/CSA/EN 60950-1, 62368-1, UL508 and IEC/EN 62477-1 (OVC III) | |
| Size (W x H x D) | mm | 35 x 124 x 125 mm | 41 x 124 x 125 mm |
| Warranty | years | Three years | |

About TDK Corporation

TDK Corporation is a leading electronics company based in Tokyo, Japan. It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's portfolio features passive components such as ceramic, aluminium electrolytic and film capacitors, and magnetics, high-frequency, and piezo and protection devices. The product spectrum also includes sensors and sensor systems such as temperature and pressure, magnetic, and MEMS sensors. In addition, TDK provides power supplies and energy devices, magnetic heads and more. These products are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda. TDK focuses on demanding markets in the areas of information and communication technology and automotive, industrial and consumer electronics. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2018, TDK posted total sales of USD 12 billion and employed about 103,000 people worldwide.

About TDK-Lambda Corporation

TDK-Lambda Corporation, a group company of TDK Corporation, is a leading global power supply company providing highly reliable power supplies for industrial equipment worldwide. TDK-Lambda Corporation meets the various needs of customers with our entire range of activities, from research and development through to manufacturing, sales, and service with bases in five key areas, covering Japan, Europe, America, China, and Asia.

For more details, please pay a visit to <http://www.tdk-lambda.com/>

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